

Production Control

Rain CII's Production Control process is managed by the Production Control Manager (located in our Covington, Louisiana, office) and by Production Control Coordinators responsible locally for the production facilities. Together, this team works closely with other key individuals in raw materials, logistics, laboratory, and other support functions to form the Production Control (PC) team. They are guided by a clear Quality Policy that defines our business.

The mission of the Production Control team is to meet customer requirements at the minimum cost through optimal use of raw materials, proper calcination targets, and efficient inventory management. Key performance measures include:

- shipment conformance to customer requirements;
- optimal raw material usage in both cost and quality, ensuring that necessary raw materials are available at each facility at the right time to maximize production and meet customer requirements;
- shipment projection accuracy;
- management of logistics costs.

Central Planning Function

Steps in the Production Control process:

- planning of green coke distribution and storage;
- establishing green coke blends and calcining temperature targets at each facility;
- shipment, storage, and loading plan for the calcined coke.

This process is managed centrally by the Production Control Manager to optimize the outcome across all of Rain CII's locations. The Production Control team is responsible for all records pertaining to production planning in accordance with the Quality System procedures.

Rain CII's Quality Policy guides every step in our Production Control process.

Optimization Modeling

Rain CII uses a complex mixed-integer linear program to model our process and determine the most cost-effective solution.

The output is an optimal solution of green coke distribution, blend components, production levels, and shipping plans. This solution is derived from a broad range of inputs including green coke volumes and quality, plant production capability and costs, transportation costs, and customer requirements.

Customer Shipments

Customer shipments are planned to ensure all customer requirements can be achieved. The shipment projection is a vital part of this planning process. A projection is created for each customer shipment. A customer shipment may be delivered in many different ways, including; ocean going vessel, barge, rail or truck. Members of the PC team review and discuss these shipment projections carefully for accuracy and to discuss various aspects of the plan. After each shipment, the PC team compares the projected quality to the actual quality shipped. Accuracy and conformance to customer requirements are assessed to evaluate team performance and to identify areas for continuous improvement.

Reports from Rain CII's laboratories are frequently referenced to assure quality – a critical component in meeting our customers' requirements. Quality measurements of green coke (as received and in storage), in process materials, and finished product quality are available and used to construct shipment plans.

Monitoring Product Quality

As CPC is produced at our facilities for a specific shipment or for inventory, the Production Control Coordinators at each plant monitor production quality daily. If the quality results are not acceptably within our projections, then the Production Control Coordinator will take corrective action to resolve the difference.

Customer shipments are sampled during loading according to facility operating procedures which conform to industry standards and are analyzed per the customers' requirements. Members of the Production Control team can facilitate additional sampling or analyses as required to ensure we meet our customers' expectations.

We routinely monitor and measure green coke and calcined coke inventories. Adjustments to green coke receipt and distribution plans, as well as transfers of finished product between shipping terminals, are implemented as needed to ensure the proper materials are on-hand when needed to meet customer shipment schedules.

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